



CNC-Spezialmaschinen



**CNC Machining Centre with 5-axis technology CR 27**

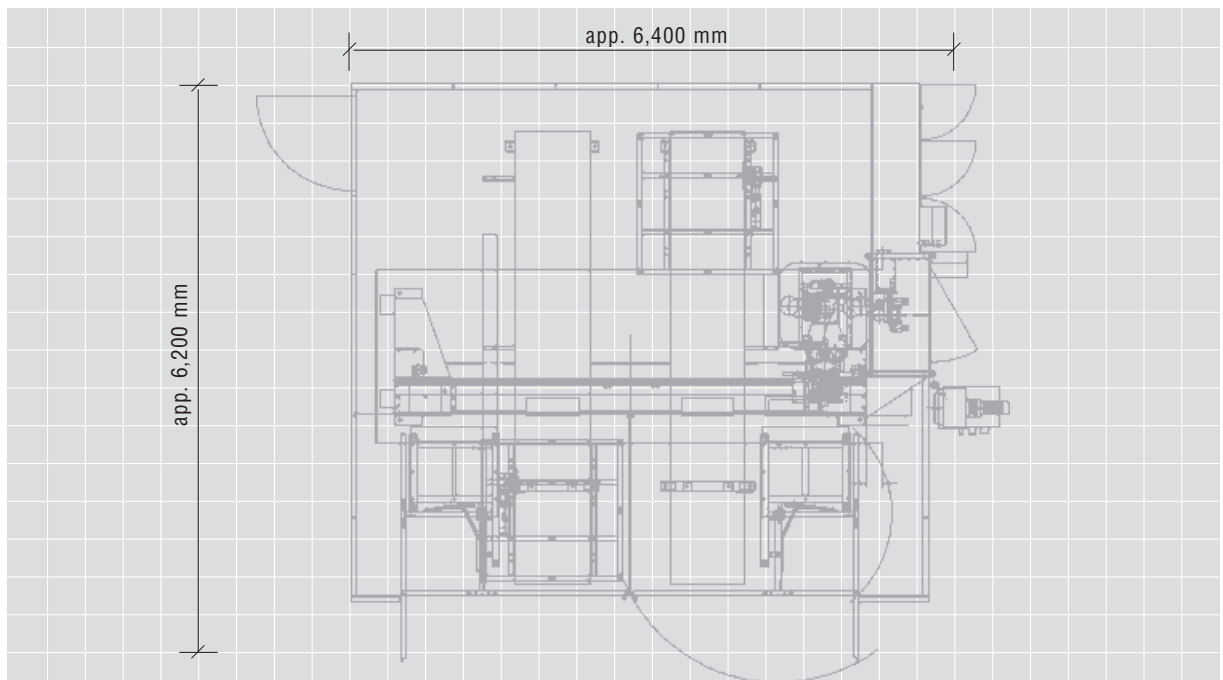
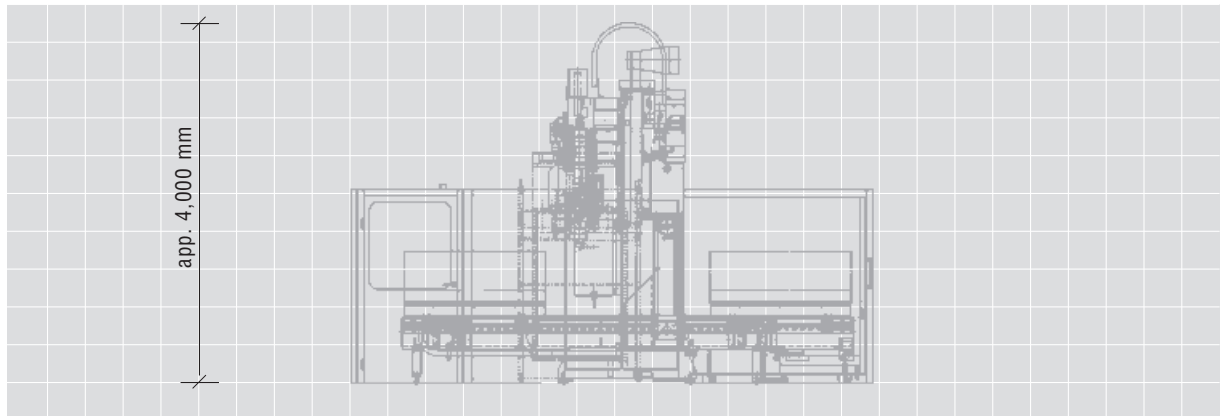
for high-speed machining of wood-derived products, aluminium, plastics  
and compound material – in single or tandem table design –



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## Foundation and surface plan

Tandem tables approx. 6,400 x 6,200 x 4,000 mm (w x d x h) basic machine dimensions,  
i.e. additional space for peripheral devices (control cabinet etc.) needs to be considered accordingly; see foundation plan



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## CNC Machining Centre with 5-axis technology CR 27

for high-speed machining of wood-derived products, aluminium, plastics and compound material

### Fields of application

The design of the **CR 27** is based on a field-proven concept. Machines with stationary gantry enable high travelling dynamics and thus stand for first-class routing results. This series meets the high standard of those manufacturers requiring three-dimensional machining and machining on multiple sides. This machining centre has been designed for precise machining operations and is used in the vehicle and vehicle equipment industry, by manufacturers of components for technical products as well as by manufacturers of furniture.

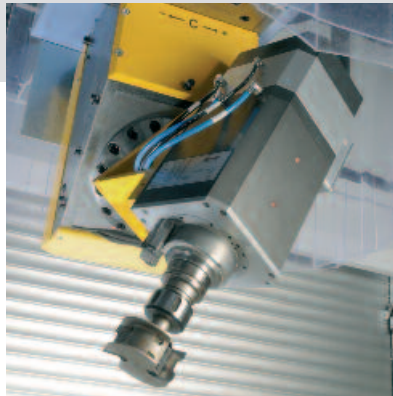
The **CR 27** for the machining of aluminium is of special design and specifically suited to the requirements of light metal machining.

Dynamic rigid design, a high-duty routing unit and a large tool magazine together with the field-proven 5-axis technology allow complete machining operations with only one clamping. Due to the machine design with mobile tables, precision is achieved with high dynamics.

A special tool place for a saw blade with a max. dia. of 450 mm can optionally be provided in the chain-type tool changer.

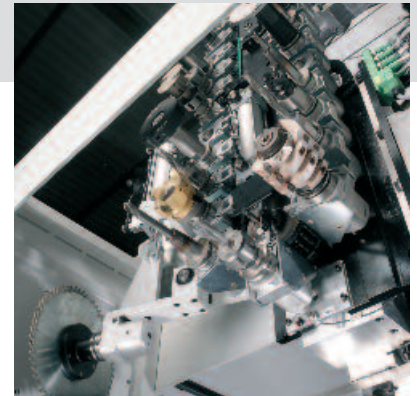
A vertically adjustable protection and extraction bin reduces the danger from ejected chips and dust.

The tandem table technique allows alternating operation and minimizes downtimes for loading and unloading of the workpieces. Both tables can be coupled for the machining of large workpieces.



### Routing unit

with tool interface HSK F 63,  
other spindles on request



### Tool magazine

Chain-type tool magazine with  
12, 16, 24, 32 tool places, optional  
horizontal magazine and tool shuttle



### Machine table

Top table,  
alternatively with supporting bars



### CNC controller

Siemens 840 Dsl or BWO 920



### Machine table alternative

Vacuum matrix table with slots



### Machining of aluminium

Vacuum fixture for the machining  
of skateboard blanks

## Technical Data CR 27 Standard

<b>Controller</b>	Siemens 840 Dsl or BWO 920, mobil control panel
<b>Routing spindle</b>	with tool interface HSK F 63, water-cooled, power max. 16 kW infinitely variable speed regulation up to 24,000 rpm
<b>Working unit</b>	Universal aggregate with Z axis stroke 800 mm, C 540°, A +/- 98° C/A arranged at an angle of 50°
<b>Extraction hood</b>	vertically adjustable via CNC extraction connection 1x dia. 300 mm
<b>Axis drives</b>	X axis toothed rack Y axis toothed rack Z axis recirculating ball screw
<b>Machine table</b>	Aluminium top table with plane surface
<b>Clamping station</b>	Vacuum clamping device, 1 vacuum circuit per table
<b>Safety guard</b>	Swivel doors at the front, safety guard with 1 door at the rear side, safety guard between the tables, roller shutters
<b>Working areas in 3- and 5-axis operation</b>	Tool diameter 160 mm, total tool length 160 mm X = 1,500 mm, Y = 1,500 mm, Z = 420 mm Tandem tables X = 2 x 1,500 mm, 1x 3,000 with coupled tables
<b>Travel speeds</b>	X = 60 m/min, Y = 60 m/min, Z = 24 m/min, C/A = 10,000 °/min
<b>Tool changer</b>	Chain-type tool magazine with 12 tool places (standard) optional 16, 24, 32 tool places tool diameter 160 mm, total tool length 160 mm (max. dia. 90 mm with magazine with 24, 32 tool places) tool weight max. 6 kg, saw blade with max. 350 mm Ø pick-up tool place for saw blade 450 mm Ø
<b>Installation details</b>	Machine weight approx. 10,000 kg with Y axis stroke 1,500 mm Required space approx. 8,100 x 5,800 x 3,600 mm (w x d x h) see foundation and surface plan